CLAIMS

What is claimed is:

- 1 1. A turf reinforcement mat comprising:
- 2 at least one polymer net layer;
- a non-woven mat comprising a plurality of multi-dimensional polymer
- 4 fibers; and,
- 5 a polymer yarn, stitching said net layer to said non-woven mat.
- 1 2. The turf reinforcement mat of claim 1, wherein said multi-dimensional
- 2 polymer fiber has at least three edges and at least three channels.
- 1 3. The turf reinforcement mat of claim 1, wherein said multi-dimensional
- 2 polymer fiber is selected from the group consisting of polyolefins, polyesters,
- 3 polyamides and blends thereof.
- 1 4. The turf reinforcement mat of claim 1, wherein said multi-dimensional fibers
- 2 have a length from about 2 inches (5 cm) to about 12 inches (30 cm).
- 1 5. The turf reinforcement mat of claim 1, wherein said multi-dimensional
- 2 polymer fiber has a density of from about 300 denier (333 decitex) to about
- 3 2000 denier (2222 decitex).
- 1 6. The turf reinforcement mat of claim 5, wherein said multi-dimensional
- 2 polymer fiber has a density of from about 500 denier (555 decitex) to about
- 3 1100 denier (1222 decitex).
- 1 7. The turf reinforcement mat of claim 1, wherein the polymer of set net layer
- 2 is selected from the group consisting of polyolefins, polyesters, polyamides
- 3 and blends thereof.

1	8.	The turf reinforcement mat of claim 1, further comprising a second polymer
2		net layer, said non-woven mat being located between said first and second
3		nets.
1	9.	The turf reinforcement mat of claim 1, wherein the tensile strength of the turf
2		reinforcement mat is at least 30% greater than the tensile strength of an
3		otherwise identical turf reinforcement mat having round multi-dimensional
4		polymer fibers.
1	10.	A method for erosion control and revegetation facilitation comprising:
2		providing a turf reinforcement mat comprising
3		at least one polymer net layer,
4		a non-woven mat comprising a plurality of multi-dimensional
5		polymer fibers; and,
6		a polymer yarn, scitching said net layer to said non-woven mat;
7		laying said turf reinforcement mat on a section of ground to be
8		reinforced;
9		securing said turf reinforcement mat to the ground;
10		distributing soil and seed onto said turf reinforcement mat such that the
11		section of ground is quickly revegetated and thereby protected from
12		further erosion.
1	11.	A method for erosion control and revegetation facilitation as set forth in claim
2		10, wherein said multi-dimensional polymer fiber has at least three edges and
3		at least three channels.

12. A method for erosion control and revegetation facilitation as set forth in claim

consisting of polyolefins, polyesters, polyamides and blends thereof.

10, wherein said multi-dimensional polymer fiber is selected from the group

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- 1 13. A method for erosion control and revegetation facilitation as set forth in claim
- 2 10, wherein said multi-dimensional fibers have a length from about 2 inches
- 3 (5 cm) to about 12 inches (30 cm).
- 1 14. A method for erosion control and revegetation facilitation as set forth in claim
- 2 10, wherein said multi-dimensional polymer fiber has a density of from about
- 3 300 denier (333 decitex) to about 2000 denier (2222 decitex).
- 1 15. A method for erosion control and revegetation facilitation as set forth in claim
- 2 14, wherein said multi-dimensional polymer fiber has a density of from about
- 3 500 denier (555 decitex) to about 1100 denier (1222 decitex).
- 1 16. A method for erosion control and revegetation facilitation as set forth in claim
- 2 10, wherein the polymer of set net layer is selected from the group consisting
- 3 of polyolefins, polyesters, polyamides and blends thereof.
- 1 17. A method for erosion control and revegetation facilitation as set forth in claim
- 2 10, further comprising a second polymer net layer, said non-woven mat being
- 3 located between said first and second nets.